

ABSTRACT

The present invention relates to a cache coherency maintaining method for a database management system (DBMS) operating in a multi-system sharing a disk, and more particularly, to buffer installation method supporting detection-based and avoidance-based consistency maintenance policy in a shared disk-based multi-DBMS improved to select the procedure for each type and allow all procedures to be consistent using the characteristic of the DBMS controlled coherently by unit of table, block and record. To achieve this, the present invention provides a cache consistency maintenance procedure to select one of detection-based cache consistency maintenance procedure optimized for record-based locking and avoidance-based consistency-based maintenance procedure optimized for table and block-based locking. To support the characteristic of DBMS in which table locking and record locking are consistent to access the same table, the two kinds of the consistency maintenance policies for the same block are processed by a single buffer load process and the two kinds of the consistency maintenance policies are consistent with each other to provide better configuration and performance.